

## A Possible Cipher for a Possible President November 29

Who is the famous individual mentioned here? ---

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Cryptology has been important in several of our presidential elections. In the memorable 1876 election, Samuel Tilden, the Democratic Party candidate, won the popular vote, but did not get sufficient votes in the Electoral College. The election, as provided by the Constitution, was decided by the House of Representatives, which selected Republican Rutherford Hayes. As both political parties sought to investigate problems related to voting in several key states, they communicated with their investigators via enciphered telegrams. A *History Today* article described the use of codes in the 1920 election, used by the Democratic Party to coordinate appearances across the country by Democratic Vice Presidential candidate Franklin Roosevelt.\*

The Center for Cryptologic History recently came across another case, taken from the book, *The Book of Codes: Understanding the World of Hidden Messages*.

The 1912 election was a pivotal one that changed the country's policies; it resulted in the election of a Democrat, Woodrow Wilson, ending almost total dominance of the White House by the Republicans for half a century.\*\* Wilson won in large part because former Republican president Theodore Roosevelt, denied the Republican nomination that year, ran as an independent, i.e., on the Progressive or "Bull Moose" Party ticket. Roosevelt took votes away from the Republican nominee, William Howard Taft, giving a clear victory to Wilson. Senator Joseph M. Dixon of Montana was Roosevelt's campaign manager and, in a March 1912 letter to Frank Harper, Roosevelt's secretary, requested the use of a cipher for correspondence with the National Roosevelt Committee. To facilitate things, he himself devised one for consideration.



Dixon's cipher was as simple as it gets, providing almost no security. What he proposed was essentially a simple substitution cipher known as the Caesar shift, named after Julius Caesar who supposedly used it during the Gallic Wars. This cipher uses a simple shift in the order of the alphabet to encrypt a message. Actually, Caesar's was more challenging, using a four letter shift (A=D)—Dixon's cipher only used one (A=B). Dixon did however make his version a little more difficult to break, by instructing that the messages be grouped into five letters without punctuation and spaces. After encryption and grouping, THEODORE ROOSEVELT (UIFPE PSFSP PTFWF MU) would appear as the title of the post.

No evidence exists that "the Dixon cipher" was ever adopted.

Sources: *The Book of Codes: Understanding the World of Hidden Messages* by Paul Lunde; and, *Masked Dispatches: Cryptograms and Cryptology in American History, 1775-1900*, by Dr. Ralph Weber (CCH Publication).

\* This is the same Roosevelt who was elected president in 1932 and would win reelection three more times (1936, 1940, 1940). In 1920 the Democratic Party team (James Cox and Roosevelt) lost to the Republican team of Warren Harding and Calvin Coolidge).

\*\* Grover Cleveland was the only Democrat to win the White House in this period, doing it twice, nonconsecutively, 1885-1889 and 1893-1897.